Draft List and Evaluation of Potential BDCP Analytical Tools Currently Under Development

Note to Reviewers: This table describes analytical tools identified by the Analytical Tools Technical Team that are under development and may become available for use during BDCP implementation. The Team will update this table as additional analytical tools that are under development are identified.

Tool Type	Name	Applications	Key Assumptions and Uncertainties	Level of Acceptance/Peer Review	Caretaker
Hydrodynamics/ Water Quality	UnTrim3D	San Francisco Bay and Delta hydrodynamics, salinity	3-D, short duration simulations, unstructured network, currently includes Bay through central Delta	Model formulation is peer reviewed, application to Bay-Delta documented in the DRMS report on the Water Analysis Module, full Delta implementation not yet complete	Michael Mac Williams, Ed Gross
Process Models	Delta smelt models (Kimmerer et al.)	3 model types: Particle tracking (short-term transport and movement), individual based (population level response), and matrix projection models (stage-structured)	All model types are in preparation	Unknown (models are in preparation)	Wim Kimmerer
Statistical Correlations					
Delta smelt	Salinity vs STN survey for smelt (Guerin et al)	Relates fall salinity and subsequent STN survey for smelt; also found relationships with SJR flow index.	Relates fall salinity to subsequent STN for smelt; existing regulatory conditions	Unknown (manuscript in preparation)	CCWD, others